AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of claims:

1 - 34 (canceled without prejudice)

35. (currently amended) A computer implemented process optimization method, comprising:

~~obtaining~~ transforming a plurality of organization related transaction and text data into an integrated database and a computational model of organization financial performance that relies on a plurality of transformed data inputs and identifies a contribution to an organization market value and an organization risk for each of one or more elements of value, external factors and risks for each of one or more segments of enterprise value by learning from the data,

obtaining a process specification that identifies one or more expected process outputs, ~~a plurality of organization related transaction data~~ and a plurality of process feature data,

identifying an impact of each process feature on the expected process outputs;

mapping the expected process outputs to the computational model of organization financial performance;

creating a financial simulation model for the organization using said mappings, model and process data;

determining an optimal mix of process features using the output from said simulation model in an optimization analysis, and

displaying the optimal mix using a paper document or an electronic display

where the computational model of financial performance analyzes the portfolio effect associated with organization elements of value and organization risks and optionally produces ~~two~~ one or more reports detailing organization market value and risk by element of value, external factor and risk for each of one or more segments of enterprise value in a matrix of risk or a matrix of value format.

36. (previously presented) The method of claim 35 where an organization is selected from the group consisting of a single product, a group of products, a division, a company, a multi-company corporation, a value chain or a collaborative multi-enterprise operation.

37. (previously presented) The method of claim 35 that further comprises identifying an optimal mix of processes for the organization.

38. (previously presented) The method of claim 35 where an optimal mix of process features is a mix that achieves financial goals selected from the group consisting of maximize organization value, minimize organization risk and combinations thereof.

39. (previously presented) The method of claim 35 where a plurality of process feature data further comprises data that encapsulates the different options the process manager has for using the resources required to produce the process outputs.

40. (previously presented) The method of claim 35 wherein automated learning is used to develop information that supports method completion selected from the group consisting of developing a computational model of organization financial performance and combinations thereof.

41. (previously presented) The method of claim 35 where a process specification further comprises data selected from the group consisting of design data, financial data, operating factor data, commodity prices and combinations thereof.

42. (previously presented) The method of claim 35 where a process specification and a plurality of process feature data are obtained from databases selected from the group consisting of a design system database, a process financial system database, an operating factor database and combinations thereof.

43. (previously presented) The method of claim 35 where process simulation system data are optionally used to support method steps selected from the group consisting of identifying an impact of one or more process features on one or more process outputs, identifying an impact of one or more process outputs on a computational model of financial performance, and combinations thereof.

44. (currently amended) The method of claim 35 where an organization matrix of risk format is defined by one or more organization segments of value and one or more organization related risks where the segments of value are selected from the group consisting of current operation, real option, derivative, excess financial asset, market sentiment and combinations thereof and

where the organization risks are selected from the group consisting of variability risks, market volatility risks, contingent liabilities, event risks, extreme risks, normal risks and combinations thereof.

45. (currently amended) The method of claim 35 where an organization matrix of value format is defined by one or more organization segments of value, elements of value and external factors where the one or more elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment, knowledge, information technology, intellectual property, investors, partnerships, processes, production equipment, quality, vendors, supply chains, vendor relationships, visitors and combinations thereof and where the one or more organization segments of value are selected from the group consisting of current operation, real option, derivatives, excess financial assets, market sentiment and combinations thereof.

46. (previously presented) The method of claim 45 where external factors are selected from the group consisting of numerical indicators of conditions external to the organization, numerical indications of prices external to the organization, numerical indications of organization conditions compared to external expectations of organization condition, numerical indications of the organization performance compared to external expectations of organization performance and combinations thereof.

47. (previously presented) The method of claim 35 that optionally displays an impact of the optimized feature mix on a position of the organization relative to an efficient frontier.

48. (previously presented) A program storage device readable by a computer, tangibly embodying a program of instructions executable by at least one computer to perform an optimization method, comprising:

obtaining a computational model of organization financial performance that identifies a contribution to an organization value and an organization risk for each of one or more elements of value, external factors and risks for each of one or more segments of enterprise value, a process specification that identifies one or more expected process outputs, a plurality of organization related transaction data and a plurality of process feature data,

identifying an impact of each process feature on the expected process outputs;

mapping the expected process outputs to the computational model of organization financial performance;

creating a financial simulation model for the organization using said mappings, model and process data;

determining an optimal mix of process features using said simulation model, and

displaying the result using a paper document or an electronic display

where the computational model of financial performance analyzes the portfolio effect associated with organization risks and optionally produces two or more reports detailing organization market value and risk by element of value, external factor and risk for each of one or more segments of enterprise value in a matrix format.

49. (previously presented) The program storage device of claim 48 where an organization is a single product, a group of products, a division, a company, a multi-company corporation, a value chain or a collaborative multi-enterprise operation.

50. (previously presented) The program storage device of claim 48 where the method further comprises identifying an optimal mix of processes for an organization.

51. (previously presented) The program storage device of claim 48 where an optimal mix of process features is a mix that achieves financial goals selected from the group consisting of maximize organization value, minimize organization risk and combinations thereof.

52. (previously presented) The program storage device of claim 48 where a plurality of process feature data encapsulate the different options the process manager has for using the resources required to produce the process outputs.

53. (previously presented) The program storage device of claim 48 where a plurality of process feature data identifies any options for implementing a process or a process feature at a future date.

54. (previously presented) The program storage device of claim 48 where a plurality of process specification data further comprises data selected from the group consisting of design data, financial data, operating factor data, commodity prices and combinations thereof.

55. (previously presented) The program storage device of claim 48 where a plurality of process specification data and feature data are obtained from databases selected from the group

consisting of a design system database, a process financial system database, an operating factor database and combinations thereof.

56. (previously presented) The program storage device of claim 48 where process simulation system data are optionally used to support method steps selected from the group consisting of identifying an impact of one or more process features on one or more process outputs, identifying an impact of one or more process outputs on a computational model of financial performance and combinations thereof.

57. (previously presented) The program storage device of claim 48 where organization risks are selected from the group consisting of variability risks, market volatility risks, contingent liabilities, event risks, extreme risks, normal risks and combinations thereof.

58. (currently amended) The program storage device of claim 48 where the one or more elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, employee relationships, equipment, knowledge, information technology, intellectual property, investors, partnerships, processes, production equipment, quality, vendors, supply chains, vendor relationships, visitors and combinations thereof and where the one or more organization segments of value are selected from the group consisting of current operation, real option, derivatives, excess financial assets, market sentiment and combinations thereof.

59. (currently amended) A process optimization apparatus, comprising:

a computational model of organization financial performance that identifies a contribution to an organization value and an organization risk for each of one or more elements of value, external factors and risks for each of one or more segments of enterprise value,

an organization related process specification that identifies one or more expected process outputs and a plurality of process feature data,

means for storing and processing said computational model, specification and data,

means for identifying an impact of each feature on one or more expected process outputs;

means for mapping the expected process outputs to the computational model of organization financial performance;

means for creating a financial simulation model for the organization using said mappings, model and data;

means for determining an optimal mix of process features using said simulation model, and

means for displaying the optimal mix using a paper document or an electronic display

where the computational model of financial performance analyzes the portfolio effect associated with organization elements of value, external factors and organization risks.

60. (previously presented) The apparatus of claim 59 that optionally displays an impact of the optimized feature mix on a position of the organization relative to an efficient frontier.

61. (previously presented) The apparatus of claim 59 that further comprises identifying an optimal mix of processes for the organization.

62. (previously presented) The apparatus of claim 59 where an optimal mix is the mix that maximizes organization value while minimizing organization risk.

63. (previously presented) The apparatus of claim 59 where a plurality of process feature data encapsulate the different options the process manager has for using the resources required to produce the process outputs.

64. (previously presented) The apparatus of claim 59 where a plurality of process feature data identifies any options for implementing a process feature at a future date .

65. (previously presented) The apparatus of claim 59 where a process specification further comprises data selected from the group consisting of design data, financial data, operating factor data, commodity prices and combinations thereof.

66. (previously presented) The apparatus of claim 59 where a process specification and a plurality of feature data are obtained from databases selected from the group consisting of a design system database, a process financial system database, an operating factor database and combinations thereof.

67. (previously presented) The apparatus of claim 59 where process simulation system data are optionally used to support method steps selected from the group consisting of identifying an impact of one or more process features on one or more process outputs, identifying an impact of one or more process outputs on a matrix of value, identifying an impact of one or more process outputs on a matrix of risk and combinations thereof.

68. (currently amended) The apparatus of claim ~~59~~ 67 where an organization matrix of risk is defined by one or more organization segments of value and one or more organization related risks where the segments of value are selected from the group consisting of current operation, real option, derivative, excess financial asset, market sentiment and combinations thereof and

where the organization risks are selected from the group consisting of variability risks, market volatility risks, contingent liabilities, event risks, extreme risks, normal risks, strategic risks and combinations thereof.